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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/566,774 | 01/31/2006 | Satoshi Okudera | WOO1-5697 (PCT) | 7817 |
| Adams & Wilks | 7590 01/05/200 S | EXAMINER | | |
| Suite 1231 | | STIMPERT, PHILIP EARL | | |
| 17 Battery Place New York, NY 10004 | | | ART UNIT | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
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| | 10/566,774 | OKUDERA ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Philip Stimpert | 3746 | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w. - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | l. lely filed the mailing date of this communication. (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on 23 Oc | action is non-final. nce except for formal matters, pro | | | | |
| Disposition of Claims | | | | | |
| 4) ☐ Claim(s) 1-14 is/are pending in the application. 4a) Of the above claim(s) 1-4 is/are withdrawn for the specific state of the above claim(s) 1-4 is/are withdrawn for the specific state of the | · election requirement. r. a)∐ accepted or b)⊠ objected | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 3/20/2006, 9/18/2008. | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | te | | | |

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DETAILED ACTION

Election/Restrictions

- 1. Applicant's election of Group III in the reply filed on 23 October 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
- 2. Claims 1-4 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 23 October 2008.

Specification

3. The abstract of the disclosure is objected to because it is too long, and contains multiple paragraphs. Correction is required. See MPEP § 608.01(b).

Drawings

- 4. Figure 7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
- 5. The drawings are objected to because they are partially labeled in kanji (Figure numbers particularly). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the

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replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

6. Claim 13 is objected to because of the following informalities: the claim recites "each ends," however "each" is singular and "ends" is plural. This will be construed as "each end" in this office action. Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 5-11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita (US 6,599,108) in view of Shrader (US 3,877,546).
- 9. Regarding claim 5, Yamashita teaches a vacuum pump which generates vacuum by sucking and discharging a gas, comprising a pump case (1) for the vacuum pump, a thread pump stator (7) that supports the pump case, a base (not labeled, see Fig. 1)

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that supports the thread pump stator (7), a stator column (14) formed integrally with the base, and rotating blades (4, 5) arranged in multiple stages on a rotor (2) which covers the stator column (14). Yamashita does not teach a cooling water pipe buried in the stator. Shrader teaches a vacuum pump having a stator column and a cooling water pipe (119) buried in the stator column. Shrader teaches that the cooling water pipe provides cooling to the stator column. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to bury a cooling water pipe as taught by Shrader in the stator column of Yamashita in order to provide cooling thereto.

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- 10. Regarding claim 6, Yamashita teaches that the pump case has a flange (which would serve as a fastening portion) at the bottom thereof that one of ordinary skill in the art would expect to be fastened to the thread pump stator (7) via the base (and the flange of the thread pump stator 7 visible in Fig. 1) and to provide at least radial support to the pump case.
- 11. Regarding claim 7, Yamashita teaches that the external casing of the pump is substantially formed by the pump case (1), the thread pump stator (7) and the base.
- 12. Regarding claim 8, Yamashita teaches that inner and outer peripheral surfaces of the stator column are different in shape (frustoconical and stepped respectively).
- 13. Regarding claim 9, Yamashita teaches a second cooling water pipe (25) arranged in the base and thus substantially on the outer surface of the thread pump stator (7).
- 14. Regarding claim 10, Yamashita teaches a heating element (10) arranged substantially on the outer surface of the thread pump stator (7).

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15. Regarding claim 11, Shrader teaches a branched water inlet port, in that the inlet line (119) branches in two directions into the recess (117). Shrader also teaches that "a similar arrangement... is provided for a coolant return passage," (col. 3, ln. 27-28).

- 16. Regarding claim 13, Shrader teaches a joint (121) and a "similar arrangement" presumably including a similar joint, each provided at the inlet and outlet of the cooling water pipe respectively. Shrader further teaches that the joint (121) is partially buried in the vacuum pump, and is flush (contiguous) with the external surface of the pump.
- 17. Regarding claim 14, Shrader does not teach particular materials for the cooling water pipe or the joint (121). One of ordinary skill would find it obvious to form these element from the same material however, if for no better reason than to simplify the procurement for manufacture of the pumps.

Allowable Subject Matter

- 18. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 19. The following is a statement of reasons for the indication of allowable subject matter: the limitation of the branches of the water inlet and outlet ports being formed in the base of the pump is not shown in or considered obvious over the art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Stimpert whose telephone number is (571)270-1890. The examiner can normally be reached on Mon-Fri 7:30AM-4:00PM, EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/ Supervisory Patent Examiner, Art Unit 3746

/P. S./ Examiner, Art Unit 3746 2 January 2009